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# Indian Standard GRADING FOR KOKUM KERNELS FOR OIL MILLING

UDC 633.855.624: 665.1.032.1



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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

## Indian Standard

### GRADING FOR KOKUM KERNELS FOR OIL MILLING

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## Indian Standard

# GRADING FOR KOKUM KERNELS FOR OIL MILLING

#### O. FOREWORD

- **0.1** This Indian Standard was adopted by the Indian Standards Institution on 16 August 1977, after the draft finalized by the Oils and Oilseeds Sectional Committee had been approved by the Chemical Division Council and the Agricultural and Food Products Division Council.
- **0.2** KOKUM kernels are obtained from seeds of KOKUM (Garcinia indica Chois.), also known as KOKAM, tree. KOKUM trees grow in the forests of Western Ghats from Konkan southwards in Karnataka, Tamil Nadu, Maharashtra, Goa and Kerala. It also grows in forests of Assam, Khassi and Jaintia hills and West Bengal.
- **0.3** Fruits from KOKUM tree contain 3 to 8 seeds. The fruit is about 2.5 to 5 cm in diameter and red in colour, sometimes with yellow tinge. The seeds are decorticated and kernels crushed and solvent extracted to get fat.
- **0.4** The requirements for fat obtained from KOKUM kernels is covered in IS: 8591-1977\*.
- **0.5** This standard contains clause **5.1** which calls for agreement between the purchaser and the supplier.
- 0.6 In the preparation of this standard substantial assistance has been derived from data supplied by the Directorate of Oilseeds Development, Hyderabad and Khadi and Village Industries Commission, Bombay which is gratefully acknowledged.
- 0.7 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS: 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

<sup>\*</sup>Specification for KOKUM fat.

<sup>†</sup>Rules for rounding off numerical values (revised).

#### IS: 8557 - 1977

#### 1. SCOPE

1.1 This standard prescribes requirements and methods of sampling and test for grading of KOKUM kernels for oil milling.

#### 2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in 2 of IS: 3579-1966\* shall apply.

#### 3. GRADES

3.1 The material shall be of two grades, namely, Grade 1 and Grade 2.

#### 4. REQUIREMENTS

- **4.1** The material shall be obtained from the seeds of the fruit borne on the KOKUM (Garcinia indica Chois.) also known as KOKAM tree.
- 4.2 The material shall not emit foul odour.
- 4.3 The material shall also comply with the requirements given in Table 1.

TABLE 1 REQUIREMENTS FOR KOKUM KERNELS FOR OIL MILLING (Clauses 4.3 and 8.1)

SL No.	CHARACTERISTIC	REQUIREMENT FOR		METHOD OF TEST		
		Grade 1	Grade 2	IS: 3579-1966*)		
(1)	(2)	(3)	(4)	(5)		
i)	Damaged kernels and weeviled kernels, percent by mass, Max	3	5	)		
ii)	Slightly damaged kernels, percent by mass, Max	2	3			
iii)	Shrivelled and immature kernels, percent by mass, Max	5	7	} 4		
iv)	Split and broken kernels, percent by mass, Max	10	12			
$\mathbf{v})$	Impurities, percent by mass, Max	2	3			
vi)	Total of (i) to (v)	15	20			
vii)	Moisture content, percent by mass, Max	7	8	5.1		
viii)	Oil content, percent by mass, Min	45	40	5.2		
ix)	Acid value of extracted oil, Max	12	15	5.3		
*Methods of test for oilseeds.						

<sup>\*</sup>Methods of test for oilseeds.

#### 5. PACKING

5.1 The material shall be packed in clean, dry, sound, single, new or unmended B-Twill bags or as agreed to between the purchaser and the supplier.

#### 6. MARKING

- **6.1** The bags containing the material shall be marked with the following particulars:
  - a) Name and grade of the material,
  - b) Mass of the material in bags,
  - c) The year of the crop, and
  - d) The source of supply.

#### 7. SAMPLING

7.1 Representative samples of the material shall be drawn as prescribed in IS: 4115-1967\*.

#### 8. TESTS

- 8.1 Tests shall be carried out according to the methods prescribed in IS: 3579-1966. Reference to the relevant clauses of that standard are given in col 5 of Table 1.
- 8.2 Quality of Reagents Unless specified otherwise, pure chemicals and distilled water (see IS: 1070-1977‡) shall be used in tests.

Note — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

<sup>\*</sup>Methods for sampling of oilseeds.

<sup>†</sup>Methods of test for oilseeds.

Specification for water for general laboratory use (second revision).

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